

## iat 431: speculative design

week 1: introduction  
dr. carman neustaedter

## instructor & ta

dr. carman neustaedter  
instructor

ben unterman  
bau@sfu.ca



## my background

siat, 2010  
university of rochester  
kodak research labs  
microsoft research

taught 431 for five years



## contacting me

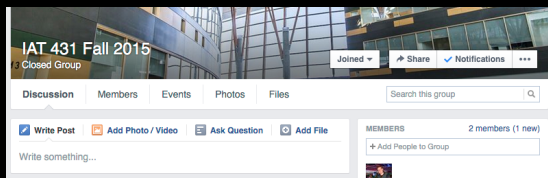
email: [carman@sfu.ca](mailto:carman@sfu.ca)  
facebook: [facebook.com/carmster](https://www.facebook.com/carmster)  
twitter: [dr\\_carmster](https://twitter.com/dr_carmster)  
web: <http://clab.iat.sfu.ca/carman>  
physical: 2822

office hours: right after class for 1 hour (at Blenz)



## build class community

Facebook group: see course web page  
everyone sees questions/answers, discussion



## learning style: flipped class

learning styles are changing  
teaching styles need to change  
technology is changing

I teach best when talking directly with students  
students learn best talking directly with me

I don't teach, I facilitate learning  
I don't lecture, I explore the topic with you

## flipped classroom

PDFs of slides posted a week early  
audio clips posted a week early

look at home, listen on the train, or do both  
together

## flipped classroom

**lecture** – discussion time about difficult areas and  
applying the ideas

if people are not prepared and there is no  
discussion, we move to studio lab early – **use me!**

**studio lab** – working with examples, applying the  
ideas to assignments

## technology use is encouraged

use it all  
look things up, find examples, find definitions  
backchannel discussions about the material  
not okay for non-course stuff

spec

0%, F

## the goal of the game

advance through each stage of:  
art, design, hci to become a speculative designer

## game rules

complete assignments and projects  
answer weekly reading questions  
complete an in-class exam

collect experience points (xp) – determines your grade  
the game master has the final say on points

## game mechanics

freedom to fail: lab crits, iterative design, riddle questions

rapid feedback: lab crits, online scoring

progression: online scoring, riddle questions

storytelling: move through ranks

spec

clab.iat.sfu.ca/431/index.php

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**spec**

**Main / HomePage**

**Spec is a game.** It's a game about Speculative Design - products, concepts, and creations that bridge the fields of art, design, cultural studies, and human-computer interaction. To play this game, you must be enrolled in IAT 431 at the School of Interactive Art and Technology at Simon Fraser University in Surrey, BC, Canada. This site documents the rules of the game and describes how you can win.

This game explores the way in which we think about technology design in the past, present, and future, and the new opportunities that arise when we think a little differently. It emphasizes the creation of designs that provide alternative possibilities for technology design based in critical theory, cultural studies, and phenomenology.

Game Master: Dr. Carmen Neustarben  
Teaching Assistant: Ben Utterman (email: ben@iat.sfu.ca)

**Navigation**

**General**

- Course Outline
- Readings
- Calendar & Topics
- Classroom Rules
- Team Evaluations
- Facebook Group Fall 2015

• Site Maps

- User Study Reflection

**The Game**

- Game Rules & Levels
- Experience Points
- Riddle Submissions
- Scores

**Challenges/Assignments**

- Cultural Study
- Design Fiction
- Final Project

**Examples**

- Spring 2013 Earthquake Projects
- Fall 2014 Earthquake Projects
- Fall 2015 Culture Projects

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<http://clab.iat.sfu.ca/431>

go through each section of website

**Course Description:**

Provides students with the opportunity to experiment with designing in various non-normative frameworks provided by Cultural Studies, Critical Theory and Phenomenology. Students will examine design's potential for cultural, social and ethical critique of emerging technologies and society. Rather than merely illustrating theoretical positions, this examination involves enacting and embodying differing theoretical positions, thereby rendering criticism productive. Individual design expertise and voice is emphasized.

**Course Objectives:**

The goal of this course is to develop skills necessary for understanding, interpreting, and thinking about future designs. Students will study the theoretical perspectives of speculative design, methods for creating flexible and innovative designs of the future, and techniques for critiquing culture and design. Lectures will be complemented with hands-on activities in studio labs along with assignments aimed at creating conceptual design proposals and future design prototypes.

**Learning Outcomes:**

Students will be able to:

- understand, critique and analyze designs from non-typical design perspectives including value-sensitive design, critical design, ludic design, and reflective design
- analyze, evaluate, and critically reflect on the design of human-centered solutions with respect to current and emerging design, social and cultural issues
- design a tangible artifact or digital program from a non-typical design perspective such as value-sensitive design, critical design, ludic design, or reflective design
- conduct a field evaluation of a speculative design to understand and receive critical feedback and cultural understanding by non-designers

**Topics:**

The thematic investigation will change periodically and will focus on a range of topics impacting society and culture in the present and near future.

**Evaluation:**

Your total course grade will consist of the following percentage breakdown.  
 40% Individual Assignments  
 30% In-Class Exam  
 30% Group Projects (group work with individual grades)

Students must get at least 50% in each of the above components of the course in order to pass.

All team/group assignments must be completed as a group with your respective team members or you will receive 0 marks for them. All individual components must be completed individually or you will receive 0 marks for them.

You can earn up to 2% bonus by participating in designated research studies within SIAT as a learning experience to broaden your understanding of research in interactive arts and technology. This includes 1% per study that you participate in.

Your TA and Instructor will have final say over who are your group/team members.

You will complete one or more team member evaluations during the term. If your evaluations illustrate you are not performing an adequate amount of work on team submissions, components of your grade may be adjusted to reflect the evaluation. Team members may also directly influence portions of your grade.

**TEXTS, RESOURCES + MATERIALS:**

Course pack

**PREREQUISITES:**

Completion of 63 credits

experience points

you must get at least 50% in each of the components of the course in order to pass

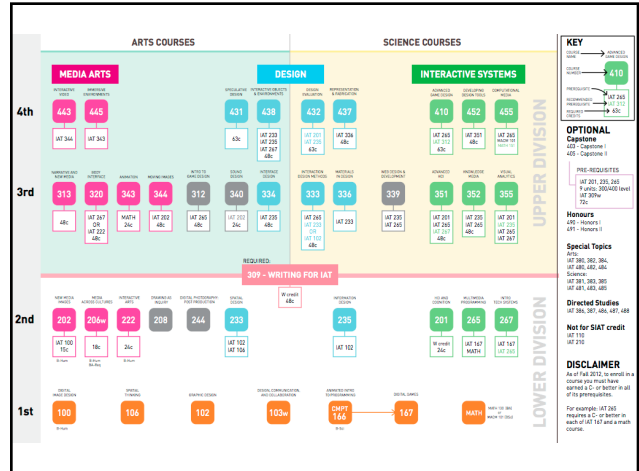
LEVEL	TITLE	XP
LEVEL 20	Grand Master Speculative Designer	9500
LEVEL 19	Master Speculative Designer	9000
LEVEL 18	Senior Speculative Designer	8500
LEVEL 17	Speculative Designer	8000
LEVEL 16	Junior Speculative Designer	7500
LEVEL 15	Senior Artistic Designer	7000
LEVEL 14	Artistic Designer	6500
LEVEL 13	Junior Artistic Designer	6000
LEVEL 12	Senior Artist	5500
LEVEL 11	Artist	5000
LEVEL 10	Junior Artist	4200
LEVEL 9	Artistic Intern	3600
LEVEL 8	Senior Designer	2800
LEVEL 7	Designer	2000
LEVEL 6	Junior Designer	1300
LEVEL 5	Design Intern	800
LEVEL 4	Senior Usability Engineer	500
LEVEL 3	Usability Engineer	300
LEVEL 2	Junior Usability Engineer	100
LEVEL 1	Usability Intern	0

## how to earn xp

- individual assignments (max 4000 XP)
- two riddle questions (500 each = max 1000 XP)
  - cultural study (max 1000 XP)
  - design fiction (max 2000 XP)

group project (max 3000 XP)

in-class exam (max 3000 XP)



## this is a destination course

you should have a range of SIAT skills

it will utilize many of them: a mix of media, design, and HCI

## topic overview

## speculative design

practice led research  
design as a tool for critical reflection

source: Mitter

## discursive design

product designs that transmit ideas  
designs are not instruments of utility

source: Tharp & Tharp

## discursive designer

affect intellect through design  
critic, educator, provocateur

source: Tharp & Tharp

## different design goals

danger, adventure, transgression  
move away from "useful" and "usable"  
challenge the status quo  
imagination

source: Dunne & Raby

## (not) user studies

situations where user studies may not help  
move beyond what exists  
be innovative

if you ask people what they want in the future,  
they don't often know (or get it wrong)

## the challenge

there are few 'processes' or 'methods' for  
creating critical designs or futuristic designs

focus on discourse and examples

## specific topics

## culture & cultural studies

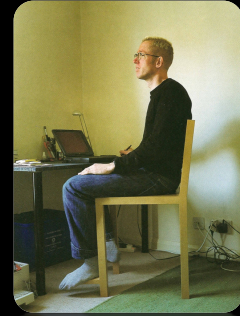




design fiction



design noir



source: Dunne and Raby

critical design



source: Wodiczko

value sensitive design

(a) The HDTV Camera



(b) The Watcher



(c) The Watched



ambiguity



source: Gaver



field trials

source: Gaver et al

art + design + hci



source: Ishii (left), Hinrichs (right)

art + design + hci

each thinks about the world in a different way  
each approaches design in a different way  
what is the overlap?  
how can we leverage it?

art, design, hci game

Which do you agree with the most?

Reality is objective and "found"	Reality is subjective and constructed	Reality is subjective and constructed on the basis of issues of power	Reality is ultimately unknowable; attempts to understand it subvert themselves
----------------------------------	---------------------------------------	---	--

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If you put on an event it would be:

a marching band or classical ballet (precise, rule-dominated)	community picnic (cooperative, interactive, humanistic)	a March of Dimes telethon (active, purposeful, concerned with marginal groups)	a circus, amusement park, or carnival (multiplicity of perspectives and stimuli; no single reference point)
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If you played a game it would be:

Tetris (exacting, quantitatively oriented, uses computer)	Clue (exchanges with other players inform decisions)	Monopoly (a world constituted by economic struggles)	Candyland (unconcerned with reality; played either by children or the extremely sophisticated)
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If you had a favorite drink it would be:

Scotch on the rocks (conventional, "hard" liquor for "hard sciences," hegemonic)	Californian white wine (natural, convivial, social, interactive)	Vodka (the revolutionary's drink; fiery, subversive)	Zima (defies categorization; neither wine, nor beer, nor hard liquor; trendy)
--	--	--	---

-----4-7- HCI----- | -----8-13---Design----- | -----14-16-----Art-----

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approaches to design

hci: empirical  
 design: exploratory  
 art: derived from experience, meaning making

your goal

draw from all three approaches  
 if you are an artist, draw from design and hci  
 if you are a designer, draw from art and hci  
 if you do hci, draw from art and design

challenges: assignments

1: cultural study (individual) – max 1000 XP



2: design fiction (individual) – max 1000 XP



Run Net: <https://vimeo.com/60234426>

2: speculative design (group of 3) – max 3000 XP

Earthquake preparedness -  
<https://vimeo.com/124784566>

Cancer awareness –  
<https://vimeo.com/80503355>

Design for developing nations –  
<https://vimeo.com/40130452>

## weekly riddles

weekly readings  
open-ended questions, think and apply  
due by **11:59pm on Sunday**

representative answers shown in class  
classes structured around answers

grading based on effort & "did you read"  
two graded out of the entire set – max 500 each

## the goal of the readings

pace your learning  
avoid cramming material  
actively respond to students' needs  
focus the class around the students

The screenshot shows a Blackboard LMS interface. At the top left, the word "spec" is displayed in a large, bold, white font. Below it, the text "Main / Readings" is visible. A "Password required" prompt is shown with a text input field containing "\*\*\*\*\*" and an "OK" button. To the right, a "Navigation" menu is displayed with the following items: "General", "Class Outline", "Readings", and "Calendar". The "Readings" item is highlighted with a red rectangular box. At the bottom left, the text "password: iat431" is visible. A small footer at the bottom of the page reads "View Edit History Attach Print Search Page last modified on February 15, 2011, at 02:42 PM".

## academic misconduct

follow university guidelines

plagiarism: using another person's ideas or creative work  
without giving credit

classroom sharing of ideas is encouraged

## late assignments

10% off per day

illness – require a legitimate doctor's note with *details about the problem*

must fill out the SFU form – see course web page

## class time

we start on time

arriving late = may be asked to leave

lecture initially

once done, studio lab time

## team evaluations

end of semester

give teammates a grade

it WILL affect project grade

## bonus

up to 2% for participation in research studies

things to do

- join the Facebook group
- read the readings for next week
- answer the riddle questions

questions?